

2022 Catch Basin Rehab Project Project Manual

Village of Caledonia
Project ID: 2022-01

March 2022



Village of Caledonia Engineering Department
5043 Chester Lane, Racine, WI 53402
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Public Services Director
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Project Manual for the
2022-01 Catch Basin Rehab Project
Village of Caledonia, Racine County, Wisconsin

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**PROJECT 2022-01
CATCH BASIN REHAB PROJECT
VILLAGE OF CALEDONIA
RACINE COUNTY, WISCONSIN**

NOTICE IS HEREBY GIVEN that sealed bids will be received by the Village Clerk for Catch Basin Rehabilitation work. All bids must be submitted to the Village Clerk by **2:30 p.m., Wednesday, March 30th, 2022** at the Caledonia Village Hall, 5043 Chester Lane, Racine, Wisconsin. All bids received will be opened and publicly read at the Village Hall on Wednesday, March 30th, 2022 at 2:31 p.m. Bids shall be in a sealed envelope marked “Catch Basin Rehab Project Bid”. The work can be generally described as the repair of the top 1’-2’ of existing catch basin structures and the removal and replacement of existing concrete curb and gutter with minor asphalt patching. There are approximately 90 structures that require a form of rehab including tuck-pointing or repair and over 500’ of curb to replace.

All proposals must be submitted on a form provided for the purpose and must be accompanied by a \$5,000.00 certified check or bid bond made payable to the Village of Caledonia to guarantee that if the proposal is accepted, a contract will be entered into and a performance bond will be furnished pursuant to s. 779.14 WI Stats., in the amount of the total contract price. The proposal shall include the proof of responsibility, the bid form, and the bid bond.

The Village Board reserves the right to accept or reject any and all bids, to waive any informalities in bidding and to award a contract to the bidder, who will best serve the interests of the village.

All work under this contract shall be in accordance with the State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, Current Edition, the Supplemental Specifications, Current Edition, the Standard Specifications for Sewer and Water Construction in Wisconsin (current edition including supplements), and these special provisions which are on file at the Caledonia Village Hall.

Electronic copies of the bid documents, in Portable Document Format (PDF), will be available by Wednesday March 16th, 2022 and may be downloaded for free at www.aledonia-wi.gov.

Dated March 9th, 2022

Advertisement Dates: March 16th, 2022
March 23rd, 2022

Joslyn Hoeffert
Village Clerk

PROOF OF RESPONSIBILITY

I hereby certify that all statements herein are made on behalf of

(Name of Corporation submitting bid)

A Corporation organized and existing under the laws of the State of Wisconsin.

A Partnership consisting of _____

An Individual trading as _____

of the City (or County) of _____

State of _____

That I have examined and carefully prepared this proposal from the plans and specifications and have checked the same in detail before submitting this proposal, that I have full authority to make such statements and submit this proposal in (its) (their) behalf; and that said statements are true and correct.

Signature: _____

Title: _____

Subscribed and sworn to before me
this _____ day of _____, 20____.

Notary Public:
County:

My Commission expires _____.

PROSECUTION AND PROGRESS: The successful bidder shall agree to have all the work substantially completed as of July 1st, 2022. Award of this contract is expected to occur on or around April 7th, after which the contractor shall submit the signed agreement and payment/performance bonds. Work may commence soon thereafter. When work on a segment or segments of the total proposed work begins, it shall continue at the rate of at least forty (40) hours per week until the proposed work or the segment(s) of the total proposed work for the calendar year is/are completed. If the successful bidder is unable to make satisfactory delivery during the period of this contract, the Village will meet its requirements by purchase on the open market and will charge any difference in price which they are required to pay to the account of the successful bidder.

BID FORM

OFFICIAL BID TO:
VILLAGE BOARD, VILLAGE OF CALEDONIA
RACINE COUNTY, WISCONSIN

BASE BID - UNIT PRICE BID

Item	Description	Est. Qty.	Unit	Unit Cost	Total
1	Tuckpoint/Backplaster Existing Structure Only	48	EA		
2	Rehab Existing Storm Sewer Structure (< 8")	27	EA		
3	Rehab Existing Storm Sewer Structure (> 8")	16	EA		
4	Install R-3501-R Casting (Village Provided)	10	EA		
5	Install R-3501-TB Casting (Village Provided)	16	EA		
6	Remove & Replace 30" Sloped Curb & Gutter (Type T)	835	LF		
7	Remove & Replace Asphalt Pavement (Full Depth)	71	SY		
8	Repair Sink Hole	3	EA		
9	Modify Existing Structure	1	LS		
Total Base Bid					
ALT 1	Rehab Existing Storm Sewer Structure w/ Plastic (<8")	27	EA		
ALT 2	Rehab Existing Storm Sewer Structure w/ Plastic (>8")	16	EA		
Total Alternate Bid (Less Items 2 & 3, Add ALT 1 and ALT 2)					

Name of Company

Address of Company

BY: _____

TITLE: _____

SUBCONTRACTOR'S LIST

<u>Contractor Name</u>	<u>Contractor Address</u>	<u>Work Being Performed</u>

INSURANCE AND LIABILITY REQUIREMENTS

LIABILITY AND INSURANCE – The Contractor shall provide and maintain from insurance companies acceptable to the Village of Caledonia, insurance to protect the Contractor, employees of the Contractor, Subcontractors of the Contractor, members of the public, Village of Caledonia and Engineer, and their authorized Officials, employees and agents, against all hazards and risks of loss. The Contractor shall also include the Village of Caledonia and Engineer as additional insureds in liability policies required by the Contract Documents with the exception of Worker’s Compensation. The Contractor shall not commence work under a Contract until he has obtained all insurance required hereunder and has filed certification thereof with the Owner, nor shall the Contractor allow a Subcontractor to commence work until all similar insurance required has been so obtained and filed with the Contractor. The insurance certification shall be in a form that is satisfactory to Owner and shall be signed and dated by an authorized representative of the insurance carrier(s).

- (A) Worker’s Compensation Insurance – The Contractor shall maintain during the life of this Contract the statutory coverage as required by Chapter 102 of the Statutes of the State of Wisconsin, as revised, and all acts amendatory thereof and supplementary thereto, for all employees of the Contractor, and Employer’s Liability Insurance in an amount not less than \$100,000 each accident, \$500,000 Disease Policy Limit and \$100,000 Disease Each Employee. All Subcontractors and suppliers of material shall furnish to the Contractor evidence of similar insurance for all of their respective employees unless such employees are covered by the protection afforded by the Contractor.
- (B) Comprehensive General Liability and Property Damage Insurance – The Contractor shall maintain during the life of this Contract Comprehensive General Liability and Property Damage insurance coverage to protect the Contractor, employees of the Contractor, Subcontractors of the Contractor, members of the public, Village of Caledonia and Engineer, and their authorized Officials, employees and agents, against all claims arising from injuries to members of the public or damage to the property of others arising out of any act or omission of the Contractor or his agents, employees or Subcontractors. In addition, this coverage shall insure the contractual liability assumed by the Contractor under the Contract Documents. The scope of this coverage shall include commercial general liability, premises and operations, independent contractors, products liability and completed operations (which shall be maintained for a minimum period of 2 years after final payment), broad form property damage, contractual liability coverage, explosion and collapse hazard and underground hazard, all subject to the following limits:

Bodily Injury and Property Damage: \$1,000,000 per occurrence and a \$2,000,000 per project General Aggregate

- (C) Comprehensive Automotive Liability and Property Damage Insurance - The Contractor shall maintain during the life of this Contract Comprehensive Automotive Liability and Property Damage insurance coverage to protect the Contractor, employees of the Contractor, Subcontractors of the Contractor, members of the public, Village of Caledonia and Engineer, and their authorized Officials, employees and agents, against all claims for injuries, including uninsured and underinsured motorists coverage, and accidental death to members of the public and damage to property of others arising from the use of motor vehicles, used on or off the construction site, whether they are owned, hired, or non-owned vehicles, all subject to the following limits:

Bodily Injury and Property Damage: \$1,000,000 per occurrence.

- (D) Umbrella - The Contractor shall maintain during the life of this Contract Comprehensive Umbrella Liability covering all referenced liability policies in this contract in an amount no less than \$2,000,000.
- (E) Builder's Risk – The Contractor shall maintain during the life of this Contract Builder's Risk insurance coverage. This insurance shall protect the Contractor and the Village of Caledonia from all insurable risks of physical loss or damage to buildings, structures, and materials and equipment, not otherwise covered under Installation Floater insurance. It shall be of the "all risk" type, with coverages designed for the circumstances which may occur in the particular work included in the Contract. The amount of such insurance shall not be less than the insurable value of the work at completion, including the aggregate value of the buildings, structures, materials and equipment to be erected or installed by the Contractor, less the value of the materials and equipment insured under the Installation Floater insurance. If the work does not include the construction of buildings or structures, the Builder's Risk insurance may be omitted providing the Installation Floater insurance fully covers the work. In the event the property to be installed requires any off premises storage in a warehouse or storage area, the policy shall be extended to provide coverage including transit between such location and the place of installation. Builder's Risk insurance shall provide for losses to be payable to the Contractor and the Village of Caledonia as their interests may appear.

- (F) Installation Floater – The Contractor shall maintain during the life of this Contract Installation Floater insurance coverage. This insurance shall protect the Contractor and the Village of Caledonia from all insurable risks of physical loss or damage to materials and equipment, not otherwise covered under Builder's Risk insurance, while in warehouses, storage areas, during construction, testing and after the work is completed. It shall be of the "all risk" type, with coverages designed for the circumstances which may occur in the particular work included in the Contract. The amount of such insurance shall not be less than the insurable value of the work at completion, including the aggregate value of the materials and equipment to be erected or installed by the Contractor, less the value of the materials and equipment insured under the Builder's Risk insurance. In the event the materials or equipment to be installed requires any off premises storage in a warehouse or storage area, the policy shall be extended to provide coverage including transit between such location and the place of installation. Installation Floater insurance shall provide for losses to be payable to the Contractor and the Village of Caledonia as their interests may appear.

The Contractor shall file with the Village of Caledonia a certification of insurance containing an endorsement to the effect that cancellation or material change of such policies shall not be effective unless thirty (30) days written notice is given to the Village of Caledonia prior to such cancellation or material change.

NOTES: The required limits of liabilities may be obtained with primary liability policies or in combination with an umbrella excess liability policy. Limitations of insurance shall be those specified above, or in the declarations for said policies, whichever is greater. The insurance of the Contractor and all Subcontractors shall be primary and non-contributory. Any insurance maintained by the additional insureds named above shall be excess and non-contributory to the insurance of the Contractor and all Subcontractors.

CONTRACT

THIS CONTRACT made this _____ day of _____, _____, by and between _____

herein called the “Contractor” and the Storm Sewer Utility District, a utility district created by the Village of Caledonia, Wisconsin, pursuant to Wisconsin State Statutes 66.0827, and the Village of Caledonia, Wisconsin, a municipal body, located in Racine County, Wisconsin. The Caledonia Storm Sewer Utility District and the Village of Caledonia herein after collectively called the “Owner”.

WITNESSETH

For and in consideration of the mutual covenants herein contained the parties agree as follows:

ARTICLE 1 SCOPE OF WORK

The Contractor hereby agrees at its own cost and expense to perform, furnish and pay for all work, workmanship, materials, labor, utility services, tools, equipment, appliances, machinery, transportation, appurtenances, services and incidentals, and such additional items not specifically indicated or described that can be reasonably inferred as belonging to the item indicated or described and as required by good practice to provide a complete and satisfactory improvement, system or structure, of any nature whatsoever necessary or convenient to complete the construction of the **2022 CATCH BASIN REHAB PROJECT, VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN** (hereinafter referred to as the “Project”) as shown on and as described in the:

2022 CATCH BASIN REHAB PROJECT, VILLAGE OF CALEDONIA, RACINE COUNTY, WISCONSIN

(hereinafter referred to as the “Contract Documents”), in a workmanlike manner and in strict conformity and full compliance with the Contract Documents herein mentioned and made a part of this Contract as fully and completely as if the same were fully set forth herein.

ARTICLE 2 CONTRACT PRICE

The Owner shall pay to the Contractor for the performance of this Contract in the manner and at the times provided in the Contract Documents, subject to the final computation of the exact units of work performed and the basis of the unit prices, and subject to any additions or deductions provided in the Contract Documents, and subject to adjustment in accordance with the Contract Documents. See attached Exhibit A for Unit Prices.

The Contractor agrees to complete the work within the time specified herein and to accept as full payment the amounts computed hereunder and determined by the Contract Documents.

The Contractor agrees that if, within one year after the Completion Date Of The Work, any work provided by the Contractor or any of his subcontractors, suppliers or service providers is found by the Owner to be defective, or not in accordance with the Contract Documents, the Contractor shall, at the Contractor's sole cost and expense and without additional payment from Owner, promptly after receipt of a written notice from the Owner to do so, and in accordance with the Owner's instructions, either correct such work, or, if the work has been rejected by the Owner, remove and replace such work with work that is in accordance with the Contract Documents and not defective.

The Owner, in case the items under this Contract are not finished within the time required, or within an extended time approved in writing by the Owner, is authorized to take charge and finish the work at the expense of the Contractor and the sureties of the Contractor.

ARTICLE 3 COMPONENT PARTS OF THIS DOCUMENT

This Contract consists of the following component parts of the Contract Documents, all of which are hereby made a part of this Contract as fully and completely as if the same were fully set forth herein:

- | | |
|----------------------------|---|
| A. Notice to Bidders | D. Insurance and Liability Requirements |
| B. Proof of Responsibility | E. Contract |
| C. Bid Form | F. Special Provisions |

The Contract Documents form a complete unit, and requirements called for by one are as binding as if called for by all.

**ARTICLE 4 PAYMENT FOR LABOR, SERVICES,
MATERIALS, PLANS AND SPECIFICATIONS**

The Contractor specifically agrees to pay all claims for labor, services, materials, plans or specifications performed, furnished, procured, used or consumed that pertain to the work described in the Contract Documents, including without limitation because of enumeration, fuel, lumber, building materials, machinery, vehicles, tractors, equipment, fixtures, apparatus, tools, appliances, supplies, electric energy, gasoline, motor oil, lubricating oil, greases, state imposed taxes, premiums for worker's compensation insurance and contributions for unemployment insurance, as the obligation of the Contractor.

IN WITNESS WHEREOF, we, the parties hereto, each hereby subscribe this Contract.

(Name of Contractor)

By: _____
Print Name: _____
Office: _____

Attest: _____
Print Name: _____
Office: _____

VILLAGE OF CALEDONIA, WISCONSIN

By: _____
James R. Dobbs
President

Attest: _____
Joslyn Hoeffert
Clerk

CALEDONIA STORM SEWER UTILITY DEISTRIC

By: _____
Howard Stacey, Utility President

Provision has been made to pay the liability that will accrue under the above and foregoing Contract.

Caledonia Finance Director

Date: _____

SPECIAL PROVISIONS

GENERAL: Any or all of the provisions in the following documents that are applicable are included in the Specifications for this Contract:

- Wisconsin Manual of Traffic Control Devices
- The Village of Caledonia Ordinances
- State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, Current Edition and all supplemental specifications.
- State of Wisconsin Department of Transportation Construction and Materials Manual (CMM)
- Standard Specifications for Sewer and Water Construction in Wisconsin, Current Edition and all supplemental specifications.

Whenever the Special Provisions and the Specifications differ, the Special Conditions shall govern. Whenever there is a conflict between the Plans, Specifications or Special Provisions, the Special Provisions shall govern.

SCOPE OF WORK: The work is generally described as the rebuilding of the tops of existing catch basin structures within curbed subdivisions of the Village of Caledonia. The existing structures are a combination of Manhole Catch Basins with deck openings of various sizes, standard 24"x36" Precast Catch Basins, and standard storm manholes with a 24" inside diameter opening. The Village will be purchasing castings to provide to the Contractor for installing on specified structures, otherwise, all existing castings will be used as indicated. Adjacent concrete curb and gutter and asphalt shall be removed to the limits marked in the field by the Engineer to allow for the rebuilding of each structure. The curb and the asphalt shall be replaced after the catch basin has been rebuilt to grade. Some structures simply need a tuck point/back plaster of the existing adjustment rings and pipe connections. The Village's Utility District will adjust manholes within the pavement limits and are not the responsibility of the contractor. The roads are expected to be resurfaced following the catch basin and curb replacement.

TRAFFIC: The Village Roads on which these projects are located shall remain open to public travel at all times during construction operations under this contract and the contractor will be required to execute all work in such a manner as to interfere as little as possible with traffic.

SCHEDULE: All repairs and pavement replacement shall be completed by July 1st. This date shall include 7 days of cure time on the finished curb. Award of this contract is expected to occur around April 7th and the Contractor may begin work shortly thereafter.

ENGINEER: The term Engineer referred to under this contract shall be the Village of Caledonia Highway Foreman, the Public Services Director, or his authorized representative limited by the particular duties entrusted to him.

MIX DESIGN: At least five (5) days prior to the beginning of operations under this contract, the contractor shall submit one copy of the proposed mix design for binder and surface courses to the Engineer for approval. The Contractor shall use 3 LT 58-28 S for the full depth asphalt patch. The work is preceding a mill and overlay project so the surface layer will be removed at a later date.

Concrete used in the work shall be provided in accordance with Section 501 of the WisDOT Specifications for Grade A air entrained concrete. Concrete for curb and gutter and flat work shall contain no more than 20% fly ash. Air entrainment shall be $7\% \pm 1.5\%$ for slip formed pavement and $6\% \pm 1.5\%$ for all other work.

All stone aggregate shall follow section 8.33.3 of the Standard Specifications and comply with ASTM Designation C-33.

PAVEMENT REMOVAL: The Contractor shall remove all existing curb and gutter and asphalt within the painted limits. A full depth saw cut will be required before breaking and removal of the pavement. Existing concrete is expected to be 8" deep at the flange and the asphalt pavement is approximately 3.5" deep throughout the cross section according to Village records. Any pavement removal or saw-cutting performed as a result of damage created by the contractors own operations shall be paid for at his/her own expense. The cost to remove the asphalt and concrete pavement full depth within the limits marked will be paid for as part of the item for removing and replacing the curb and asphalt, respectively. Asphalt pavement that has settled beyond the flange of the removal limits shall still be saw cut full depth and all loose pavement shall be removed to the top of the existing stone base. The contractor shall bid accordingly.

SUBGRADE PREPARATION: Once the curb and gutter and asphalt pavement have been removed to the top of the existing stone base, the Contractor shall prepare the stone base for placement of asphalt pavement. Areas that require "touch up" or additional stone base within 2" in depth to be brought to grade shall be done so by the Contractor using 1-1/4" dense base aggregate. In addition, soft, spongy, or washed out spots shall be removed and brought to grade using the same 1-1/4" dense base aggregate up to a approximately 3.5" for finished asphalt. The Contractor shall remove all loose and unstable material prior to the placement of the stone. The base shall be mechanically compacted by means of a plate compactor or "jumping jack". The cost to place any additional stone within the thresholds described in this section shall be included in the cost to remove and replace each pavement item respectively.

The Contractor shall conduct his/her operations to minimize the exposure of the subgrade to the elements. If the contractor fails to coordinate his/her operations to minimize the days that the sub grade is open to the elements and a weather event causes the sub-grade to be over saturated after the pavement has been removed, the cost to stabilize the sub grade shall be borne by the Contractor.

HMA PAVEMENT: The contractor shall remove approximately 2' of existing asphalt pavement in front of all curb and gutter sections designated for replacement including in front of the inlet structure. The pavement shall be removed full depth (approximately 3.5") in order to leave space for curb forms and properly place asphalt pavement. Areas with settlement shall be removed to the top of the stone base layer. Once the curb has been placed, the stone base beneath the asphalt shall be compacted per the "Subgrade Preparation" section. . The contractor shall place the 3 LT 58-28 S asphalt mix full depth in two lifts as described in the Mix Design. No tack is required if placing the within the same day. The lifts shall be mechanically compacted. The cost to furnish and install the 2' wide section of asphalt at full depth shall be included in the SY bid item for Remove and Replace Asphalt Pavement. Any additional asphalt placed due to patching the failed surface layer beyond the saw cut limits shall be considered incidental to the work.

CONCRETE CURB & GUTTER: New Curb and Gutter shall match the existing cross section, best described as a 30" mountable curb Type T. The original curb is approximately 8" deep at the flange and 11.5" deep at the back of curb. The curb transitions from a mountable section to a vertical face curb section at the existing inlet structures. The cost to remove the existing curb and gutter shall be included in the cost to replace it. The contractor shall bring the catch basin structure up to grade using the approved methods described in 'Catch Basin Rehab'. The use of shims shall be limited unless it is determined necessary by the field Engineer. If shims are used, the contractor shall vibrate the concrete around all sides to fill the void until it is flush with the inside of the structure. When installing new curb around the existing vertical face castings, the curb shall transition from a mountable curb to a typical vertical face curb (Type A). This transition shall begin at a minimum of 3' from either side of the structure. No taper is required on inlets replaced with a mountable casting.

The Contractor shall, at the minimum, install a 3/4" "boot felt" approximately 3'-5' on either side of the catch basin. All other sections of curb shall be drilled and tied into the existing curb with a minimum of 2 – No. 6 bars. Some structures will only require the removal of pavement up to the $\pm 3'$ mark on either side of the basin and others will require longer stretches of curb. Some matching joints will require both a boot felt and drilled tie bars together. The cost to install felts on either side of the catch basin shall be included in the cost per lineal foot of curb and gutter. Drilled tie bars shall also be incidental to the installation of curb and gutter. The maximum tooled joint spacing on newly installed curb shall be 10'. Certain curb replacement sections will be adjacent to a private driveway which will require a minimum 6" felt placed along the back of curb. This felt shall be incidental to the installation of the curb and gutter. The Contractor shall bid accordingly.

The Contractor shall backfill all curb sections with an approved fill or dense base aggregate stone. All rubbish and large material shall be removed from behind the curb prior to backfilling. The top 4" shall be left for the placement of topsoil and hydro-seed. The cost to backfill and landscape shall be included in the cost for curb and gutter.

TRANSPORTATION AND PLACEMENT: The specifications for transportation and placement of the HMA pavements shall conform to Section 450 of the State of Wisconsin, Department of Transportation's Standard Specifications for Highway and Structure Construction (current edition). The placing of pavement shall be conducted so

that a minimum of longitudinal joints will be exposed at the end of each day's construction.

TESTING OF BITUMINOUS PAVEMENTS: The contractor shall provide and maintain a Quality Control program. A Quality Control program is defined as all activities, including mix design process control inspection, sampling and testing, and the necessary adjustments in the process that are related to the production and placing of a hot mix asphaltic pavement which meets the requirements of the specifications. Material, which is produced out of tolerance, shall be paid at 85% of the bid price.

UTILITY MATERIALS: Catch Basins rings shall be either 2", 4" or 6" in height and made of concrete or an equal material approved by the Engineer. The adjustment rings shall be standard 24"x36", 20"x30" or 24"x30", depending on the existing structures opening. The Contractor may cut 24"x36" rings to fit the structure size as needed. An alternative bid item has been included for plastic rings. This type of ring shall be a Cretex Pro ring or approved equal. Approved Equals shall be submitted to the Engineer for review. Please list the alternate bid item prices for structure rehab utilizing plastic rings and the manufacturers approved adhesive and installation process.

All concrete rings shall be brought to grade using Type N Mortar. All back plaster / tuck point work shall also be completed using Type N Mortar.

All castings will be purchased by the Village of Caledonia or its Utility District. The castings being installed by the contractor are Neenah R-3501-R or Neenah R-3501-TB. Existing catch basin frame and grates are R-3067 or similar.

CATCH BASIN REHAB: The Contractor shall remove the existing casting and failed concrete rings on all structures marked for rehab within the project limits. The Engineer will mark how far the Contractor needs to go on each structure. There are a combination of inlet structures on this job that require rehabilitation: 24"x36" precast structures and MH/CB structures with a deck opening of various sizes. Of these MH/CB structures, there are 3 types of openings: 24"x36", 20"x30" and 24"x30" elliptical. Once the Contractor has removed the failed rings to the desired depth, he/she shall bring the structure back up to grade utilizing new adjustment rings of either 2", 4", or 6" height. The contractor shall furnish the size ring necessary to bring each structure up to grade as needed. The Village will allow the Contractor to modify, via saw-cut, 24"x36" rings in order to fit each structure properly. All rings shall be mortared in place using Type N Mortar. The outside and inside of the rings shall be mortared and have a brushed finish. The cost to remove and replace the adjustment rings and mortar them into place at grade shall be included in the cost for Catch Basin Rehab. In addition, all pipes coming into or going out of the structure shall have mortar reapplied, as needed, to finish the connection flush with the inside of the structure. The contractor shall also apply bricks as need to back plaster the openings and fill in the voids for any corbeled structures. The contractor shall perform this task on all structures and the cost to do this work shall be incidental to the Catch Basin Rehab item or Tuck Point item respectively.

Structures that are chosen to have a new casting installed will be provided by the Caledonia Storm Sewer Utility District. All other castings shall be reused on their respective structure. Any old castings that are being exchanged shall be set aside in one location for the Utility District to pick up at a time coordinated by the Contractor and the Engineer.

The bid item for structure rehab at less than 8" is based on the measurement from the top of the deck (or upper most portion of the structure to remain) and the bottom of the casting at the flow line. Castings are typically 4" thick at the flow line. The bid item for catch basin rehab (>8") is anything that exceeds that value, some of which may reach as high as 18". The contractor shall bid accordingly.

TUCK-POINT / BACK-PLASTER: The Contractor shall furnish and place mortar on all structures designated as "Tuck Point" by applying the mortar on the inside of the rings and finishing it with a brush. The typical structures that require this work are some manholes outside of the roadway and in the grass or CB's that need minimal repair. All Tuck Point structures shall also have the pipe connections back plastered as per 'Catch Basin Rehab'.

The Contractor shall realign the casting (for manholes) and any rings that may have shifted over the life of the structure. This will require additional mortar to place the top most ring in its place. This will also require the removal of topsoil around the casting to allow for it to move over. The cost to provide additional mortar and labor to remove the earth around the casting shall be included in the 'each' cost of the Tuck Point item. All top soil and seed restoration shall also be incidental to the work.

REPAIR SINK HOLE: There are 3 locations of a possible joint failure in the storm sewer pipe causing the settlement of the asphalt pavement above. The approximate depth of the failure in the pavement is between 4' and 5'. The locations are indicated on the project location map attached in the appendix. The contractor shall dig down, by hand or by mechanical means, to the source of the failure and patch it with mortar, 18" wide fabric, and backfill with slurry. Pipe sizes vary from 10" to 24" RCP. ¾" Washed stone shall be backfilled around the pipe to include 6" of cover prior to the placement of the slurry backfill. The contractor shall be required to place a concrete collar on the failure in the pipe if determined necessary by the Engineer. The remaining area shall be restored with matching asphalt patch meeting the same criteria as Section "HMA Pavement". The contractor may address all sink hole locations at one time in order to efficiently order slurry backfill. The cost to perform this work shall be included in the LS cost to repair the sink hole.

MODIFY EXISTING STRUCTURE: There is one Manhole Catch Basin structure that contains approximately a 20"x30" rectangular deck opening. This opening sits too far forward and leaves an 8" platform or bench for sediment to collect on top. The contractor shall modify this deck by saw cutting a triangular (or wedge) section out of the top whose dimensions are as follows: 8" wide x 8" deep x 30" long. This will create a sloped end that will assist water and sediment from building up on top of the deck and flow into the actual structure. The cost to furnish all labor and material to remove this section shall be paid for under the lump sum bid item "Modify Existing Structure". The Contractor will be responsible for ascertaining the nature of this structure that is called out on the project location map.

TERRACE RESTORATION: The existing grass terrace will be disturbed in locations behind the curb that are being replaced and around manhole castings being re-centered. These areas shall be restored with a minimum of 4" of **compacted** and screened top soil. The areas shall then be seeded with "hydro-seed" consisting of WisDOT Highway Mix 40 or approved equal. The seed mix shall be submitted to the Engineer for approval. All areas shall be restored to their original condition as nearly as possible. The cost to restore areas incidental to the installation of installing curb and gutter, repairing structures, or realigning castings shall be included in the cost for each item, respectively.

WORK BY OTHERS: All existing utility manholes (sanitary and storm) which fall within the paved roadway will be adjusted by the Utility District. All storm manholes within the ROW that require tuck-point work will be marked in the field.

BARRICADES AND SAFETY PRECAUTIONS: The Contractor shall maintain all traffic control devices such as, barricades, flares, fences, flasher lights, flag men and all other means as are necessary and in conformance with the MUTCD for the general safety and welfare of the public during the life of the project.

PRIVATE DRIVEWAYS: Private drives and side roads shall remain open to the public. If a closure is necessary, the contractor must provide notice to the resident or to the Village three (3) days before the work will commence.

MISCELLANEOUS PATCHING: The Contractor shall replace additional curb and gutter and asphalt patch in locations with the rehab area but not directly adjacent to a CB. The Engineer will mark areas in pink for removal and the Contractor shall follow the remove and replace directions mentioned in those respective sections. These locations are typically curb sections which have failed near catch basins or water main breaks. These areas have been marked on the location map. The Contractor will be paid for each item under its remove and replace item, respectively.

DELIVERY TICKETS: It shall be the obligation of the Contractor to obtain and provide copies of weigh bills and delivery tickets to the Engineer as work progresses. Payment quantities shall be determined from as-built field measurements.

MEASUREMENT AND PAYMENT: Measurement and Payment for each item is to be broken down in each paragraph describing the work. Any payment shall include full compensation for all materials, tools, equipment and incidentals necessary to complete the work contemplated by the contract.

Payment will be made upon receipt of an invoice for the quantity of material incorporated into the work. Lien waivers and an affidavit of compliance with prevailing wage rates as necessary are required with each request for payment.

PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ (NAME)

_____ (ADDRESS)

(Hereinafter called “Contractor”) as principal, and

_____ (NAME)

_____ (ADDRESS)

a corporation organized and existing under the laws of the State of _____ and authorized to transact business in the State of Wisconsin (hereinafter called the “Surety”) as surety, are held and firmly bound unto the Caledonia Storm Sewer Utility District, a utility district created by the Village of Caledonia, Wisconsin pursuant to Wisconsin Statutes §66.0827, and the Village of Caledonia, Wisconsin (the Caledonia Storm Sewer Utility District and Village of Caledonia, Wisconsin are hereinafter collectively called the “Owner”) in the penal sum of

_____ Dollars (\$ _____)

to be paid to the _____ Storm Sewer Utility District and Village of Caledonia, for the payment of which sum well and truly to be made the Contractor and Surety bind themselves and each of their heirs, personal representatives, administrators, successors, and assigns, jointly and severally, firmly by these presents, as follows.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Contractor has entered into a certain written Contract (hereinafter called the “Contract”) dated the _____ day of _____, _____ with the Owner for the **2022-01 Catch Basin Rehab Project**, which Contract, and the component parts of the Contract referenced in the Contract as the Contract Documents (hereinafter called the “Contract Documents”), are made a part hereof as fully and completely as if the same were set forth herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH THAT if the Contractor shall:

- (a) faithfully perform, carry out and comply with the covenants, terms and conditions of the Contract and the applicable specifications, to be by such Contractor performed;
- (b) within one year after the Completion Date Of The Work, at the Contractor's sole cost and expense and without additional payment from Owner, promptly after receipt of a written notice from the Owner to do so, and in accordance with the Owner's instructions, either correct any work provided by the Contractor or any of the Contractor's subcontractors, suppliers or service providers that is found by the Owner to be defective, or not in accordance with the Contract Documents or, if the work has been rejected by the Owner, remove and replace such work with work that is in accordance with the Contract Documents and not defective;
- (c) pay over, make good and reimburse the Owner for all loss or damage which the Owner may sustain by reason of failure or default on the part of the Contractor;
- (d) and all subcontractors of the Contractor shall faithfully perform, carry out and comply with all contracts, whether express or implied, with every person and entity, including every subcontractor, supplier or service provider, for performing, furnishing or procuring labor, services, materials, plans or specifications for the purpose of making the improvements or performing the work that is the subject of the Contract;
- (e) make all payments as required by the terms and conditions of the Contract, and shall make payment to every person and entity, including every subcontractor, supplier or service provider, of all claims that are entitled to payment for labor, services, materials, plans or specifications performed, furnished or procured for the purpose of making the improvements or performing the work as provided in the Contract and as required under Section 779.14(1e)(a) of the Wisconsin Statutes; and
- (f) pay all claims for common law or statutory liens, liens provided in Section 779.15 of the Wisconsin Statutes, and all claims under Section 779.14(1e)(a) of the Wisconsin Statutes, arising from the work or labor, services, materials, plans or specifications performed, furnished, procured, used or consumed that pertain to the improvements or work as provided in the Contract;

then this obligation shall be void; otherwise it shall be and remain in full force and effect; it being expressly understood and agreed that if the Contractor shall:

- (a) fail to faithfully perform, carry out and comply with the covenants, terms and conditions of the Contract and the applicable specifications, to be by such Contractor performed;
- (b) fail to within one year after the Completion Date Of The Work, at the Contractor's sole cost and expense and without additional payment from Owner, promptly after receipt of a written notice from the Owner to do so, and in accordance with the Owner's instructions, either correct any work provided by the Contractor or any of the Contractor's subcontractors, suppliers or service providers that is found by the Owner to be defective, or not in accordance with the Contract Documents or, if the work has been rejected by the Owner, remove and replace such work with work that is in accordance with the Contract Documents and not defective;
- (c) fail to pay over, make good and reimburse the Owner for all loss or damage which the Owner may sustain by reason of failure or default on the part of the Contractor;
- (d) fail, or any subcontractors of the Contractor shall fail, to faithfully perform, carry out and comply with all contracts, whether express or implied, with every person and entity, including every subcontractor, supplier or service provider, for performing, furnishing or procuring labor, services, materials, plans or specifications for the purpose of making the improvements or performing the work that is the subject of the Contract;
- (e) fail to make all payments as required by the terms and conditions of the Contract, or shall fail to make payment to every person and entity, including every subcontractor, supplier or service provider, of all claims that are entitled to payment for labor, services, materials, plans or specifications performed, furnished or procured for the purpose of making the improvements or performing the work as provided in the Contract and as required under Section 779.14(1e)(a) of the Wisconsin Statutes; or
- (f) fail to pay all claims for common law or statutory liens, liens provided in Section 779.15 of the Wisconsin Statutes, or shall fail to pay all claims under Section 779.14(1e)(a) of the Wisconsin Statutes, arising from the work or labor, services, materials, plans or specifications performed, furnished, procured, used or consumed that pertain to the improvements or work as provided in the Contract;

the Surety shall promptly:

- (a) faithfully perform, carry out and comply with the covenants, terms and conditions of the Contract and the applicable specifications, to be by such Contractor performed;
- (b) within one year after the Completion Date Of The Work, at the Surety's sole cost and expense and without additional payment from Owner, promptly after receipt of a written notice from the Owner to do so, and in accordance with the Owner's instructions, either correct any work provided by the Contractor or any of the Contractor's subcontractors, suppliers or service providers that is found by the Owner to be defective, or not in accordance with the Contract Documents or, if the work has been rejected by the Owner, remove and replace such work with work that is in accordance with the Contract Documents and not defective;
- (c) pay over, make good and reimburse the Owner for all loss or damage which the Owner may sustain by reason of failure or default on the part of the Contractor;
- (d) faithfully perform, carry out and comply with all contracts of the Contractor or any subcontractor of the Contractor, whether express or implied, with every person and entity, including every subcontractor, supplier or service provider, for performing, furnishing or procuring labor, services, materials, plans or specifications for the purpose of making the improvements or performing the work that is the subject of the Contract;
- (e) make all payments as required by the terms and conditions of the Contract, and shall make payment to every person and entity, including every subcontractor, supplier or service provider, of all claims that are entitled to payment for labor, services, materials, plans or specifications performed, furnished or procured for the purpose of making the improvements or performing the work as provided in the Contract and as required under Section 779.14(1e)(a) of the Wisconsin Statutes; and
- (f) pay all claims for common law or statutory liens, liens provided in Section 779.15 of the Wisconsin Statutes, and all claims under Section 779.14(1e)(a) of the Wisconsin Statutes, arising from the work or labor, services, materials, plans or specifications performed, furnished, procured, used or consumed that pertain to the improvements or work as provided in the Contract.

In addition to any other rights or remedies that the Owner possesses to enforce this Bond, the Owner may maintain an action upon this Bond against the Contractor and Surety for recovery of damages under Section 779.14(2) of the Wisconsin Statutes.

PROVIDED HOWEVER, that the Surety, for value received, hereby stipulates and agrees that no assignment, modification or change of the Contract and no change, extension of time, alteration, modification or addition to the terms of the Contract Documents or to the work to be performed thereunder, shall in any way affect or release its obligation on this Bond, and it does hereby waive notice of any such assignment, modification or change of the Contract or change, extension of time, alteration, modification or addition to the terms of the Contract Documents or to the work to be performed thereunder.

Signed, sealed, and dated this _____ day of _____, _____.

(Name of Principal)

By: _____

Print Name _____ Office _____

Attest: _____

Print Name _____ Office _____

(Name of Surety)

By: _____

Print Name _____
Attorney-in-Fact

Approved:

Caledonia Storm Sewer Utility District

By: _____
Howard Stacey
Utility President

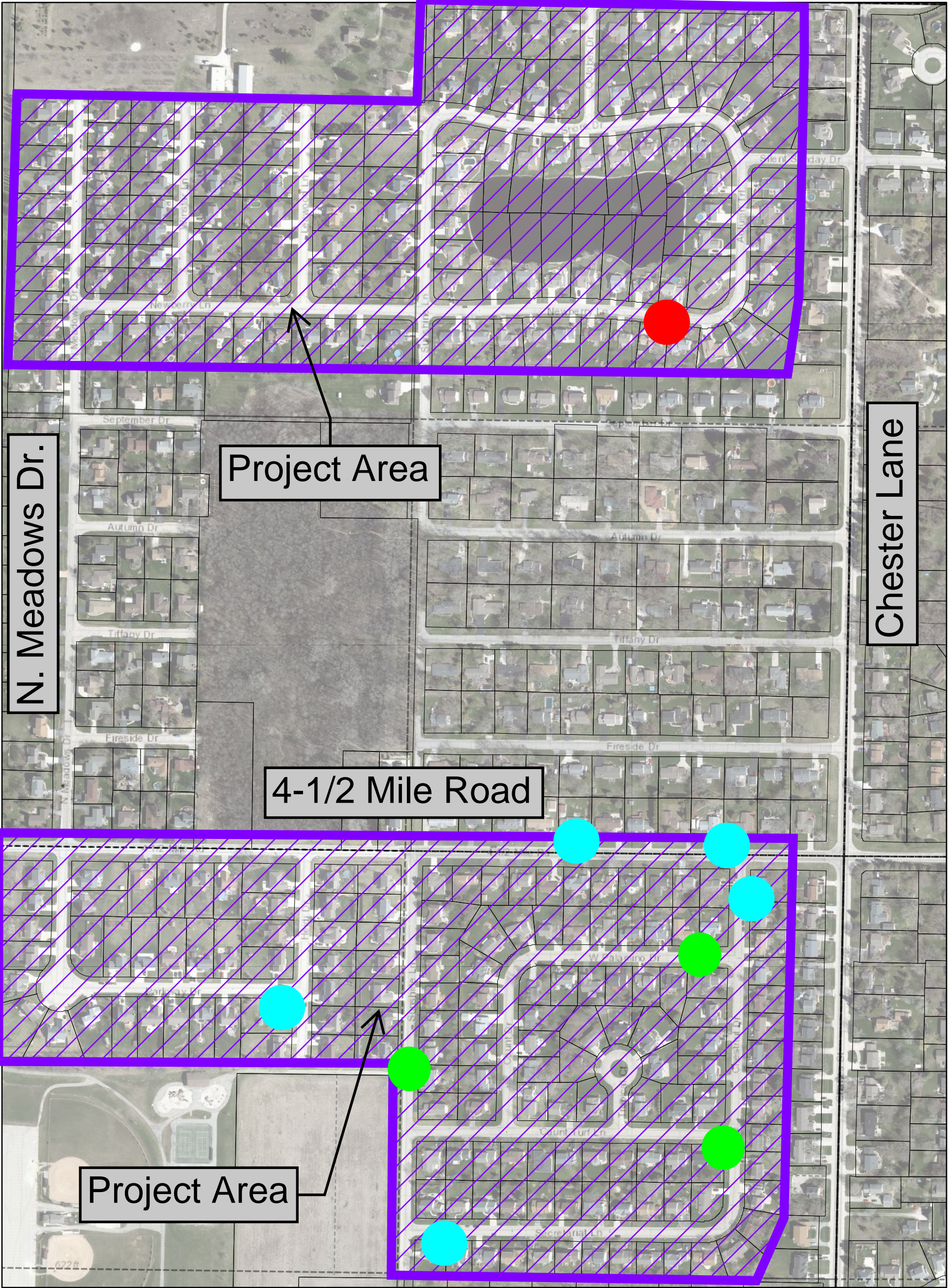
Village of Caledonia, Wisconsin

By: _____
Jim Dobbs
Village President

Attest: _____
Joslyn Hoeffert
Village Clerk.

Note: All bonds signed by an agent of the Surety must be accompanied by a certified copy of the authority to act for the Surety at the time of the signing of this Bond. The date of the Bond must not be prior to the date of the Contract.

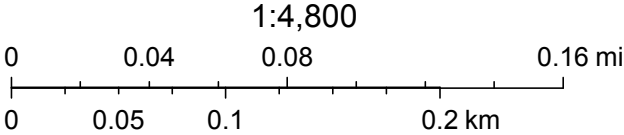
ArcGIS WebMap



February 24, 2022

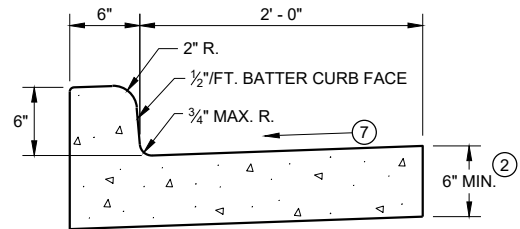
- | | | | |
|--|-------------------------|--|----------------------|
| | Quarter Quarter Section | | Parcel Tie Lines |
| | Quarter Section | | Municipal Boundaries |
| | Sections | | Water lines |
| | Tax Parcels | | Waterbody |

2020 Spring Aerial
Red: Band_1
Green: Band_2
Blue: Band_3

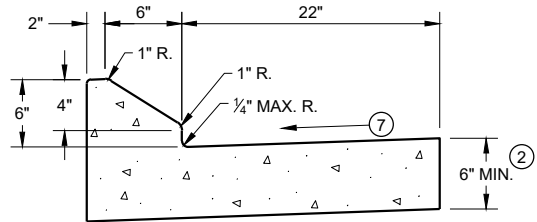


Racine County, SEWRPC
Sources: Esri, HERE, Garmin, Intermap, increment P Corp.,
GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c)
OpenStreetMap contributors, and the GIS User Community

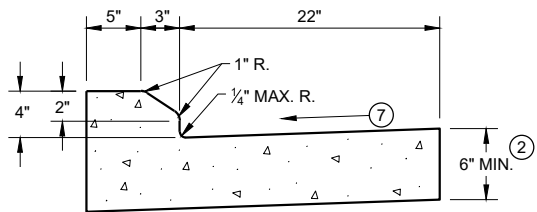
	Sink Hole		Modify Structure		Addt'l Pavement
--	------------------	--	-------------------------	--	------------------------



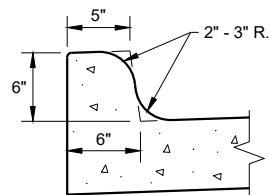
TYPES A^① & D



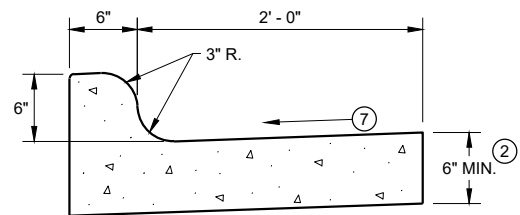
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

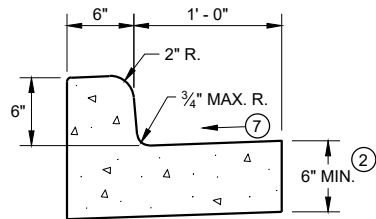


TYPES K^① & L
(OPTIONAL CURB SHAPE)



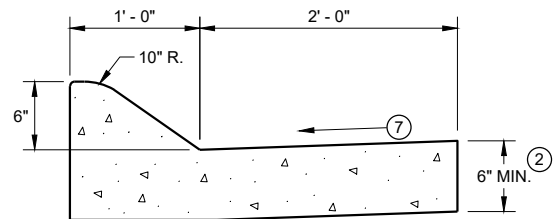
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

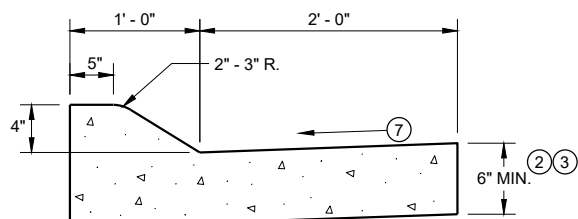


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

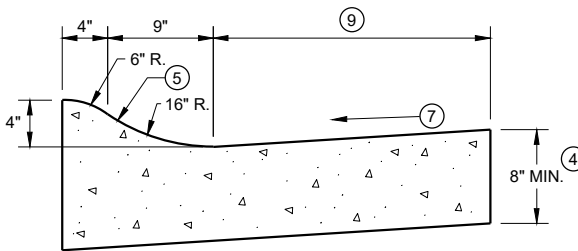


6" SLOPED CURB TYPES A^① & D



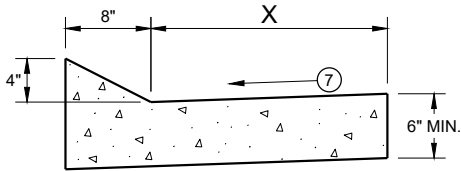
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

TBT & TBTT	X
30"	22"
36"	28"

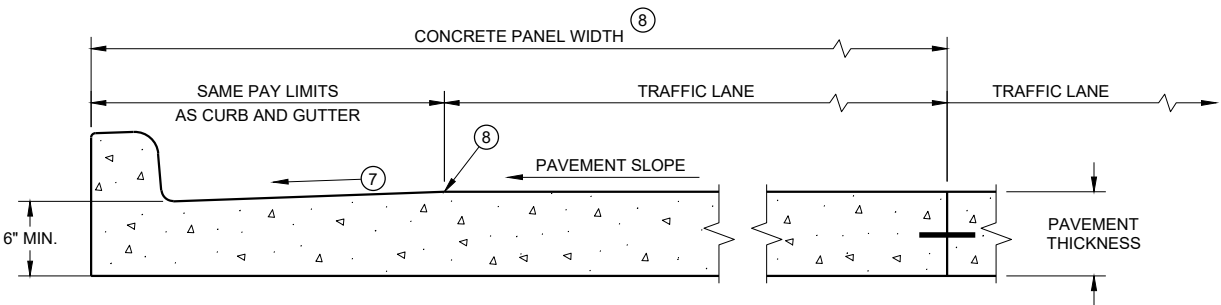


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

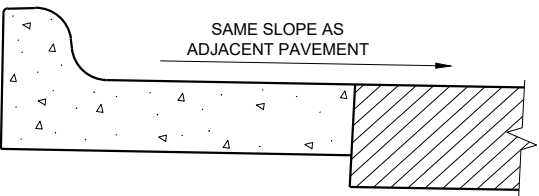
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

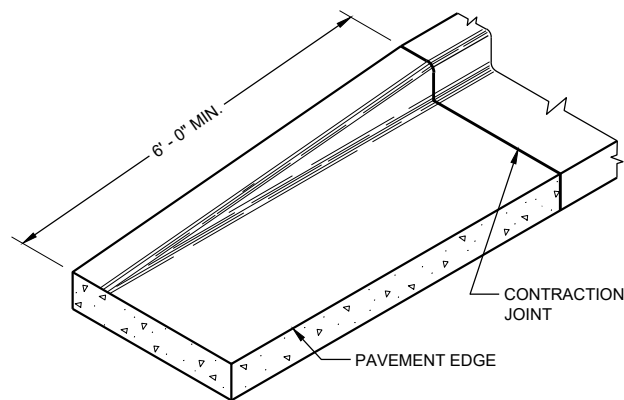
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

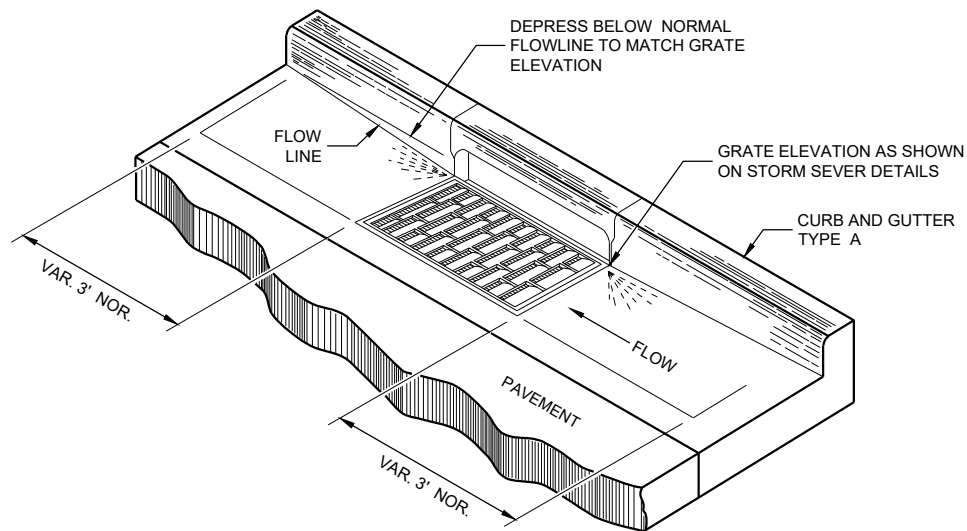
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

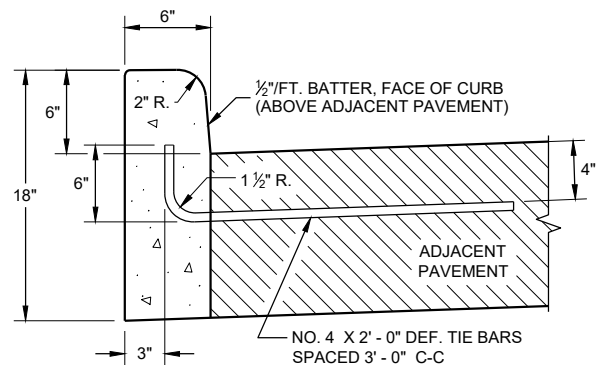
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES



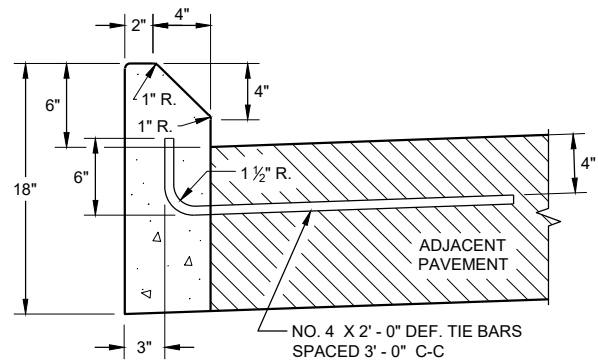
END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

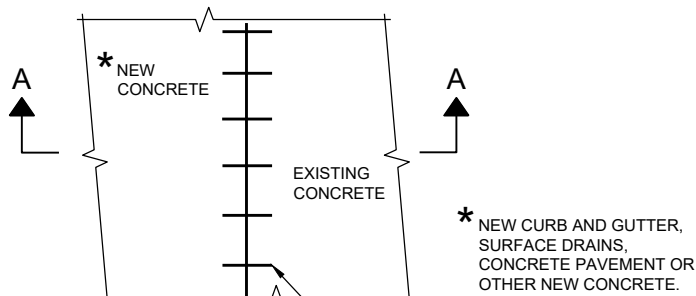


TYPES A^① & D

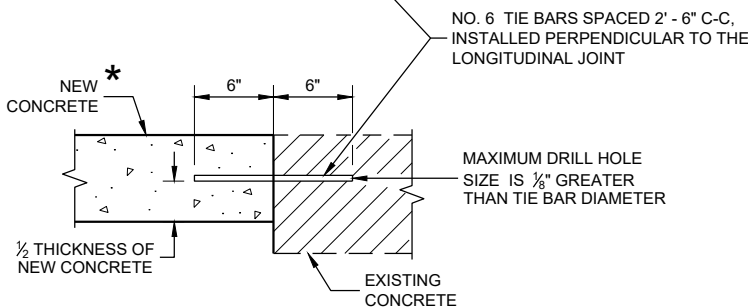


TYPES G^① & J

CONCRETE CURB



PLAN VIEW



SECTION A - A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

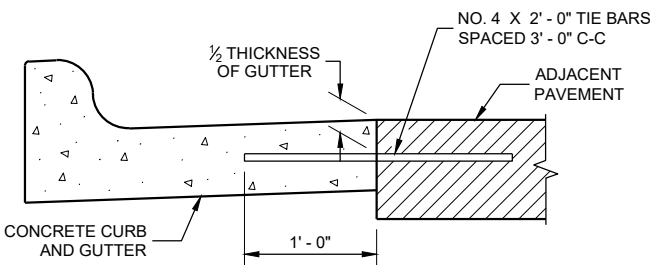
GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

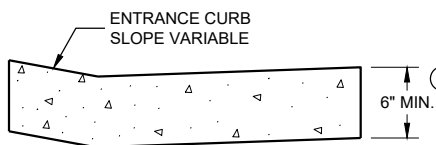
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION^①



DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA